

15

20 In a preferred embodiment, we describe polynucleotide transfection agents comprising:  
molecular conjugates of polynucleotides and membrane active polymers wherein the  
membrane active polymer is linked to the polynucleotide via labile or cleavable bond. The  
membrane active polymer may be selected from the ~~lists~~ list consisting of: amphipathic  
polymer, amphipathic polyvinylether, and membrane active peptide. The labile or cleavable  
25 bond may be selected from the list consisting of: pH-labile bonds, maleamate, acetal, enol  
ether, and disulfide bond. The polynucleotide may be selected from the list consisting of:  
single stranded polynucleotide, double stranded polynucleotide, DNA, RNA, oligonucleotide,  
expression vector, siRNA, microRNA, ribozyme, antisense polynucleotide and synthetic  
polynucleotide.

30